



Air Quality
PERMIT TO CONSTRUCT

State of Idaho
Department of Environmental Quality

PERMIT No.: P-060100

FACILITY ID No.: 777-00372

AQCR: Portable

CLASS: SM

SIC: 2951

ZONE: Portable

UTM COORDINATE (km): Portable

1. PERMITTEE

Norm's Utility Contractor, Inc.

2. PROJECT

Initial Permit to Construct, Portable Hot-Mix Asphalt Plant

3. MAILING ADDRESS

P.O. Box 2047

CITY

Coeur d'Alene

STATE

Idaho

ZIP

83816

4. FACILITY CONTACT

Tom Mattix

TITLE

Site Manager

TELEPHONE

(208) 661-5076

5. RESPONSIBLE OFFICIAL

Tom Mattix

TITLE

Site Manager

TELEPHONE

(208) 661-5076

6. EXACT PLANT LOCATION

Portable

COUNTY

Portable

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Production of hot-mix asphalt

8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200, et seq.

TONI HARDESTY, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: PROPOSED

Table of Contents

ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE.....	3
1. PERMIT TO CONSTRUCT SCOPE.....	4
2. HOT-MIX ASPHALT PLANT	5
3. STATEWIDE REQUIREMENTS	6
4. OPERATIONS IN PM ₁₀ NONATTAINMENT AREAS	12
5. PERMIT TO CONSTRUCT GENERAL PROVISIONS.....	13

Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Idaho Department of Environmental Quality
gr/dscf	grains per dry standard cubic foot
HMA	hot-mix asphalt
hr/day	hours per day
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
MMBtu/hr	million British thermal units per hour
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
O&M	operations and maintenance
PERF	Portable Equipment Relocation Form
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PTC	permit to construct
RAP	recycled asphalt pavement
SIC	Standard Industrial Classification
SO ₂	Sulfur dioxide
T/hr	tons per hour
T/yr	tons per any consecutive 12-month period
UTM	Universal Transverse Mercator
VOC	Volatile organic compound

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100

Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

1. PERMIT TO CONSTRUCT SCOPE***Purpose***

This permit to construct (PTC) allows the operation of a newly-acquired portable hot-mix asphalt (HMA) plant. This permit is the facility's initial permit to construct (PTC). This PTC does not replace any other permit.

Regulated Sources

Table 1.1 lists all sources of emissions that are regulated in this PTC.

Table 1.1 REGULATED EMISSIONS SOURCES

Permit Section	Source Description			Emissions Control(s)
2	<u>HMA Drum Dryer</u> Manufacturer: Hauk Quad Burner, Model 8835HMSIPR Manufacture Date: 1991 Type of HMA plant: Portable, Parallel flow drum mix	Max. hot-mix asphalt production rate: 250 T/hr Design aggregate: Up to 50% RAP HMA burner permitted fuel type(s): Natural gas	Drum dryer maximum rated heat input capacity: 88.2 MMBtu/hr	Baghouse Manufacturer: Model 8800-P/10
2	<u>Asphalt Tank Heater</u> Manufacturer: Astec/CIE Power Flame Burner Model H915-91 Type: Horizontally fired	Permitted Fuel Type(s): Natural gas	Rated heat input capacity: 2.115 MMBtu	None

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100

Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

2. HOT-MIX ASPHALT PLANT

2.1 Process Description

Norm's Utility Contractor, Inc. (Norm's) operates a portable hot-mix asphalt (HMA) plant that consists of a natural gas-fired parallel flow drum mix dryer, an aboveground asphalt oil storage tank with a natural gas-fired tank heater, a baghouse, storage silos, conveyors and feed bins, aggregate stock piles, and haul trucks.

Stockpiled aggregate is transferred to feed bins. Aggregate may consist of up to 50 percent recycled asphalt pavement (RAP). Aggregate is dispensed from the bins onto feeder conveyors, which transfer the aggregate to the natural-gas-fired drum mix dryer. Aggregate travels through the rotating drum dryer, and when dried, the aggregate is mixed with liquid asphalt cement. The resulting HMA is then conveyed to hot storage bins until it can be loaded into trucks for transport off site or transferred to silos for temporary storage.

Electrical power is provided by a connection to the local grid or may be provided using a portable generator engine. Permit conditions for the operation of the generator are included in the facility's portable ready-mix concrete plant, PTC No. P-050124, dated March 8, 2006.

2.2 Emissions Control Description

Particulate matter (PM) emissions from the HMA drum dryer are controlled by a baghouse.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100

Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

3. STATEWIDE REQUIREMENTS

The permittee shall comply with the following conditions when the portable hot-mix asphalt plant is operated anywhere (attainment or unclassifiable areas) within the state of Idaho.

Emissions Limits

3.1 Opacity Limit (NSPS)

Visible emissions from the HMA drum dryer shall not exhibit 20% opacity or greater in accordance with 40 CFR 60.92(a)(2). Opacity shall be determined using EPA Method 9.

3.2 Opacity Limit (IDAPA)

Emissions from any stack, vent, or other functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period in accordance with IDAPA 58.01.01.625. Opacity shall be determined using the procedures contained in IDAPA 58.01.01.625.

3.3 HMA Drum Dryer PM Grain Loading Emissions Limit (NSPS)

Particulate matter (PM) emissions from the HMA drum dryer shall not exceed 0.04 grains per dry standard cubic foot (gr/dscf) in accordance with 40 CFR Part 60.92(a)(1).

3.4 Criteria Pollutant Emissions Limits

The PM and PM₁₀ emissions from the HMA drum dryer shall not exceed any corresponding emissions rate limits listed in Table 3.1

Table 3.1 ASPHALT PLANT STACK EMISSIONS LIMITS

Source Description	PM	PM ₁₀	
	lb/hr	lb/day	T/yr
Asphalt Plant Stack	8.25	57.5	3.45

Notes: lb/hr = pounds per hour

lb/day = pounds per 24-hour period (pounds per day)

T/yr = tons per consecutive 12-month period (tons per year)

3.5 Toxic Air Pollutant Emissions Limits

Carcinogens

- Formaldehyde emissions shall not exceed 957 pounds per year from the asphalt plant, asphalt tank heater, and silo filling and load-out, combined.
- Polycyclic organic matter (POM) emissions shall not exceed 0.51 pounds per year from the asphalt plant, asphalt tank heater, and silo filling and load-out, combined.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100				
Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

3.6 Visible Fugitive Emission Limits at Property Boundary

Visible fugitive dust emissions shall not be observed leaving the property boundary for a period or periods aggregating more than three minutes in any 60 minute period. Visible emissions shall be determined by Method 22, which is contained in 40 CFR Part 60 Appendix A, or by a DEQ-approved alternative method.

Operating Requirements

3.7 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter (PM) from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities, and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

3.8 Permitted Fuels

- The fuel used in the hot-mix asphalt plant shall be natural gas, exclusively.
- The fuel used in the asphalt tank heater shall be natural gas, exclusively.

3.9 Hot-Mix Asphalt Production Limits

- The production rate of the asphalt plant shall not exceed a maximum of 250 tons of HMA per hour.
- The production rate of the asphalt plant shall not exceed a maximum of 2,500 tons of HMA per day.
- The production rate of the asphalt plant shall not exceed a maximum of 300,000 tons of HMA per any consecutive 12-month period.
- Tons per day of recycled asphalt pavement fed as part of the design aggregate shall not exceed 50 percent of the total HMA production in tons per day for that day or 1,250 tons of HMA per day, whichever is less.
- The asphalt tank heater shall not operate more than 18 hours per day.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100				
Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

- The asphalt tank heater shall not operate more than 6,720 hours per any consecutive 12-month period.

3.10 Baghouse Operation

The asphalt plant shall not be operated unless the baghouse is in operation.

3.11 Baghouse Monitoring Equipment

The permittee shall, in accordance with manufacturer specifications, install, calibrate, maintain, and operate equipment to continuously measure the pressure differential across the hot-mix asphalt drum dryer baghouse.

3.12 Pressure Drop Across the Baghouse

The pressure drop across the baghouse shall be maintained within manufacturer and O&M manual specifications. Documentation of both the manufacturer and O&M manual operating pressure drop specifications shall remain on site at all times and shall be made available to DEQ representatives upon request.

3.13 Inspection and Maintenance to Minimize Polycyclic Organic Matter (POM) Emissions

- The permittee shall, in accordance with manufacturer specifications and as needed but no less frequently than annually, inspect, calibrate, and maintain the drum dryer burner to provide good combustion and maintenance practices to minimize POM emissions.
- The permittee shall, in accordance with manufacturer specifications and as needed but no less frequently than annually, inspect, calibrate, and maintain the baghouse to provide good operation and maintenance practices to minimize POM emissions.

3.14 Operations and Maintenance Manual

Within 60 days of permit issuance, the permittee shall have developed an O&M manual for the baghouse, which controls the PM emissions from the hot-mix asphalt drum dryer. The O&M manual shall describe the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the baghouse. The manual shall contain, at a minimum, the pressure drop range for the baghouse, requirements for the annual inspection and maintenance of the baghouse, and requirements for periodic inspections (i.e., monthly) during each month of operation to include but not be limited to checking the bags for structural integrity and that they are properly secured in place. The manual shall remain on site at all times and shall be made available to DEQ representatives upon request.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100				
Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

3.15 Collocation

The hot-mix asphalt plant shall not collocate with any other hot-mix asphalt plant.

Monitoring and Recordkeeping Requirements

3.16 Operating Parameters

The following parameters shall be monitored and recorded. Records of this information shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

- Pressure drop across the baghouse once weekly when the asphalt plant is operating;
- Date and results of baghouse inspection once monthly when the asphalt plant is operating;
- Hot-mix asphalt production in tons per day, tons per month and tons per any consecutive 12 month period (tons per year);
- Tons of recycled asphalt used per day; and
- Asphalt tank heater hours of operation in hours per day, hours per month, and hours per any consecutive 12-month period (hours per year).

3.17 Reasonable Control Measures

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each fugitive emissions inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken. The monthly inspection is not required when the facility is not in operation.

Records of each facility-wide fugitive emissions inspection shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

3.18 Visible Emissions Monitoring

The permittee shall conduct an inspection of visible emissions from the hot-mix asphalt plant baghouse stack during daylight hours and under normal operating conditions once during each calendar month that the asphalt plant operates. The inspection shall consist of a see/no see evaluation of visible emissions. If any visible emissions are present from the hot-mix asphalt plant baghouse stack, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with excess emissions regulations contained in IDAPA 58.01.01.130-136.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100

Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken. The monthly visible emissions inspection is not required when the facility is not in operation.

Records of each visible emissions inspection shall remain on site for the most recent two-year period and shall be made available to DEQ representatives upon request.

3.19 Performance Testing Requirements

3.19.1 Within 60 days after achieving the maximum production rate at which the hot-mix asphalt facility will operate but not later than 180 days after initial start up of the source, a performance test shall be conducted on the hot-mix asphalt plant under worst-case normal operating conditions in accordance with IDAPA 58.01.01.157, General Provision 6 of this permit, and in accordance with 40 CFR 60.90 if the initial source test for an affected facility has not been conducted in accordance with that regulation. The performance test shall be conducted to demonstrate compliance with the applicable PM standards defined in 40 CFR 60.92 and the pound per hour PM emissions standard of Section 3.4 of this permit. The following shall be monitored and recorded during the performance tests:

- The hourly production rate of the hot-mix asphalt plant expressed as tons per hour,
- The pressure drop across the baghouse, and
- The visible emissions observed during the performance tests.

3.19.2 The permittee shall conduct performance tests at a frequency of no less than once every five years to demonstrate compliance with the 0.04 grains of PM per dry standard cubic foot (gr/dscf) emissions limit, the pound per hour PM emissions limit of Section 3.4 of this permit and the 20% opacity emissions limits of Section 3.1 and 3.2 of this permit.

Reporting Requirements

3.20 Relocation

All existing portable equipment shall be registered. At least 10 days prior to relocation of any equipment covered by this permit, the permittee shall submit a scaled plot plan and a complete Portable Equipment Registration and Relocation Form (PERF, available on the DEQ website at www.state.id.us/deq/air/equip_relocat.htm), in accordance with IDAPA 58.01.01.500, to the following address:

PERF Processing Unit
DEQ – Air Quality
1410 N. Hilton
Boise, ID 83706-1255

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100				
Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

3.21 Performance Test Protocol

At least 30 days prior to conducting any emission test, the permittee is encouraged to submit a written performance test protocol to DEQ in accordance with IDAPA 58.01.01.157.01.a.

3.22 Performance Test Report

In accordance with IDAPA 58.01.01.157.04, the permittee shall submit a written report of the performance test results to DEQ within 30 days of completion of the test.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100				
Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

4. OPERATIONS IN PM₁₀ NONATTAINMENT AREAS

The permittee shall not locate the portable HMA plant in any PM₁₀ nonattainment area under this permit. As of the date of this permit, the PM₁₀ nonattainment areas in north Idaho include the Sandpoint and Pinehurst areas. Contact DEQ for current area status and more specific details about the nonattainment area boundaries.

Prior to operation in any PM₁₀ nonattainment area, Norm's Utility Contractor, Inc. shall submit an air quality permit to construct application that requests the ability to locate and operate the portable HMA plant within a PM₁₀ nonattainment area.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100				
Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

5. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the *Rules for the Control of Air Pollution in Idaho*. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify DEQ, in writing, of the required information for the following events within five working days after occurrence:
 - Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-060100

Permittee:	Norm's Utility Contractor, Inc.	Facility ID No. 777-00372	Date Issued:	PROPOSED
Location:	Portable Hot-Mix Asphalt Plant			

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.